

REMARKS

Claims 1-9 are pending.

Response to Rejections Under §§ 102/103

Claims 1-6 and 8 were rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 6,030,507 to Lupton.

Claims 1-6 and 8 were rejected under 35 U.S.C. § 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 6,500,225 to Hasegawa et al.

Claims 1-6, 8 and 9 were rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,866,493 to Lee et al.

Claims 1-6, 8 and 9 were rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,071,800 to Iwamoto et al.

Applicants respectfully traverse for the reason set forth in the Amendment filed March 6, 2009, and for the following additional reason.

Iwamoto discloses, at col. 8, lines 47-50, that “[t]he powder was compression-molded in a mold to obtain a molded body having a density of 3.7 g/cm³, and the molded body was sintered at 1,400°C under atmospheric pressure in air.” Thus, the sintering process of Iwamoto is performed to obtain a sintered molded body, to be employed as a target in Example 2. Accordingly, the sintering process of Iwamoto does not include calcining ITO powder.

In addition, Iwamoto at col. 4, lines 4-8 reads “a powder of a coprecipitated oxide of indium and tin, obtained by calcining a product obtained from a solution containing indium and tin by the coprecipitation method at a temperature of 300°C to 800°C.” The purpose of this step

is to obtain a powder from a slurry through a wet method. This differs from the calcination of a powder obtained through a dry method. In particular, the above temperature range of Iwamoto is generally employed to perform the calcination in the coprecipitation method. In fact, a roasting temperature of 600°C is employed in Comparative Example 2 in the present specification. Thus, since Iwamoto's powder is obtained through calcination at 300 to 800°C, the nature of the powder is very similar to that of the powder of Comparative Example 2. Accordingly, Iwamoto's powder has a SnO₂ solid solution content of less than 2.3 mass%.

Lee discloses at col. 8, lines 27-29, that the slurry is filtered, "dried under a temperature of 100°C, and then calcined under a temperature of 600°C," and, as demonstrated by Example 2, the powder of Lee so produced, has a BET of 6.80. Further, the working Examples of Lee were carried out using a coprecipitation method, and at an In/Sn ratio the same as that employed in Comparative Example 2 in the present specification. Thus, Lee's powder, having a BET of 6.80 corresponds to the powder of Comparative Example 2 of the present invention.

In particular, the ITO powder of Comparative Example 2, of the present specification is produced through a process that includes drying, roasting at 600°C for 3 hours and dehydration. The thus-produced powder is then calcined in air at 1,000°C for 3 hours in order to grow precipitated SnO₂ microparticles, so that SnO₂ is readily detected for determining the SnO₂ solid solution content (see Test Example 1). As demonstrated by Comparative Example 2, the SnO₂ solid solution content of the ITO powder was 2.26 mass%. Accordingly, Applicants submit that one skilled in the art will readily recognize that Lee's powder has a SnO₂ solid solution content lower than 2.26 mass%.

Applicants note that the Lee discloses in Example 2, "6.80 m²/g," which at first glance, appears to represent a BET value. However, the units are incorrect, and "6.80 m²/g" should be a

density value of “6.80 g/cm³.” In this regard, Example 2 of Lee includes a description “95% of a theoretical density; i.e., 6.80 m²/g.” Similar descriptions in Example 1 and Comparative Example 1 are given with a unit of g/cm³. Thus, the value of 6.80 corresponds to a 95% of a theoretical density of 7.15. Although Lee does not specify the BET of the powder of Example 2, based on the disclosure in Example 1, the BET of the powder can be estimated to be approximately 57 m²/g.

Thus, Iwamoto and Lee fail to anticipate or render obvious the present claims. Further, Applicants distinguish the present claims from Lupton and Hasegawa et al as set forth in the Amendment filed March 6, 2009. Accordingly, withdrawal of the rejections is respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is also directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Abraham J. Rosner
Registration No. 33,276

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: June 9, 2009